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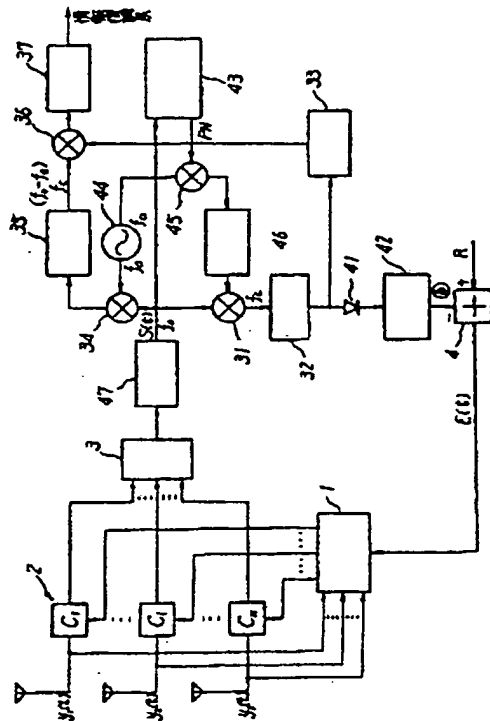
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TITLE : TRANSMISSION SIGNAL SYSTEM



ABSTRACT : PURPOSE: To control an array antenna, by making a spread spectrum signal coexist with a transmission signal as a pilot signal so as to discriminate a desired signal with a code and using this signal as a detecting carrier of a synchronizing signal of the transmission signal or a reference signal.

CONSTITUTION: A receiving signal of each antenna of an adaptive control antenna is applied to a control circuit 1, it is processed at a weighting circuit 2 and an adder 3, subtracted with the reference signal and an error signal is outputted. This receiving section is provided with a synchronism acquisition holding circuit 43 including a spread code generator, an RF amplifying circuit 47, a detector 31, a BPF 32,  $\pi/2$  phase shifter 33 and a synchronism detector 36. Moreover, an oscillator 44, a balancing detector 45, a BPF 46 and an adder circuit 4 or the like are provided. Then, the spread spectrum signal is coexisted with the transmission signal as the pilot signal and the desired signal is discriminated with the code. This signal is used as the detecting carrier of the synchronizing signal of the transmission signal or the reference signal so as to attain easily the control of the array antenna.

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